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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/714,800

11/17/2003

Heinz Hofmann

15550Z

2932

23389

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04/06/2007

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EXAMINER

GELLNER, JEFFREY L

ART UNIT

PAPER NUMBER

3643

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/714,800

Applicant(s)

HOFMANN ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 3 July 2001. It is noted, however, that applicant has not filed a certified copy of Germany 10132122.8 as required by 35 U.S.C. 119(b).

Claim Objections

Claims 8 and 9 are objected to because of the following informality:

For both claims the identifier should be changed to --withdrawn--.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cramer et al. (US 6,345,577 B1) in view of Berg et al. (US 4,770,728) in further view of Lee et al. (US 6,547,899 B2).

As to claim 1, Cramer et al. discloses a process of producing an insensitive explosive mixture (abstract) comprising TATB (col. 2 lines 52-60) in an amount less than 15% (from col. 3

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lines 45-48) onto a secondary explosive ("RDX" of col. 2 lines 10-25) to form a coating of TATB on the secondary explosive which binds the secondary crystal. Not disclosed is the secondary explosive being a crystal and the TATB being sonochemically aminated. Berg, however, discloses coating crystals of the secondary explosive (col. 2 lines 11-17); Lee et al. discloses TATB being sonochemically aminated (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Cramer et al. by using crystals as disclosed by Berg so as to have more surface area and to use sonochemically aminated TATB as disclosed by Lee et al. so as to have finer-grained TATB so as to increase shock insensitivity (see Lee et al. at abstract).

As to claim 3, Cramer et al. as modified by Berg et al. and Lee et al. further discloses use of RDX (col. 2 lines 10-26; Berg at col. 2 lines 11-17).

As to claim 4, the limitations of claim 1 are disclosed as described above. Not disclosed are the crystals being HMX. Berg, however, discloses the use of HMX (col. 2 lines 11-17). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cramer et al. as modified by Berg and Lee et al. depending upon use of the composition.

As to claim 5, Cramer et al. as modified by Berg et al. and Lee et al. further disclose the ammonium solution (abstract of Lee et al.).

As to claims 6 and 7, Cramer et al. as modified by Berg et al. and Lee et al. further disclose use of ultrasonic irradiation for amination of TATB with ammonia, and toluene (Lee et al. at col. 2 lines 10-30).

As to claim 10, Cramer et al. as modified by Berg et al. and Lee et al. further discloses a binder (Cramer et al. at col. 2 lines 27-37).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cramer et al. as modified by Berg et al. and Lee et al. in further view of Highsmith et al. (US 6,425,966 B1).

As to claim 11, the limitations of claim 1 are disclosed as described above. Not disclosed is the binder being a polyacrylic elastomer. Highsmith et al, however, discloses an explosive with TATB and HMX (see col. 5 lines 56-65) that uses either chlorotrifluoroethylene or polyacrylates as a binder (col. 5 lines 21-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the method of Cramer et al. as modified by Berg et al. and Lee et al. by substituting polyacrylate for the binder depending upon availability and cost of the binder material.

Response to Arguments

Applicant's arguments filed 21 November 2006 have been fully considered but they are not persuasive. Applicants' arguments are: (1) neither Benziger, Lee et al., nor Highsmith et al. disclose TATB being used as a coating (Remarks pages 5 and 6).

As to argument (1), new art has been applied with Cramer et al. disclosing TATB being used as a coating. Some TATB would bind to the secondary explosive even if a binder is used.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee discloses methods in sonochemistry.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeffrey L. Gellner
Primary Examiner
Art Unit 3643